

REMARKS

Posture of the case

The present application was filed on October 31, 2003. Claims 1-13 were originally presented. An Office action of August 15, 2007 presented a restriction requirement. Applicant traversed the restriction requirement in a response of September 17, 2007. In the same response, Applicant also amended all claims in order to more certainly ensure that the claims were directed to a single invention, to provide sufficient antecedent basis for all terms, and to properly format the claims.

In this reply, Applicant has canceled claims 12-13 from further consideration in this application. Applicant is not conceding that the subject matter encompassed by claims 12-13 prior to this reply is not patentable over the art cited by the Examiner. Claims 12-13 were canceled in this reply solely to facilitate expeditious prosecution of the remaining claims. Applicant respectfully reserves the right to pursue additional claims, including the subject matter encompassed by 12-13, as presented prior to this reply in one or more continuing applications.

Claim Rejections in Present Office Action

35 USC 112 Second Paragraph Rejections

Claims 1-13 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Specifically, the Office action asserts that in the phrase “generating a backbone data sequence” of claims 1, 12, and 13, the meaning of “backbone” is unclear. Also, with regard to the phrase “associating ones of the replets with subsequences of the data sequence” in claim 2, the Office action also asserts it is unclear whether one replet is associated with multiple subsequences or whether one subsequence is associated with one replet. In addition, the Office action asserts that “meta-replets” is unclear in claims 4 and 5. Finally, the Office action asserts that “using indirection” is unclear in claims 3 and 6.

Applicant herein amends claims 1 to overcome the rejection regarding “backbone data sequence.” Specifically, claim 1 is amended to substitute the term “certain” for the term “backbone.” While Applicant feels the readability of the claim suffers, the claim is amended in

order to fully cooperate with the Examiner. The adjective “certain” is used merely as a label for the convenience of the reader so that subsequent reference to the same “data sequence” may be clearly referred to in a definite fashion by means of the label. Applicant submits that the amendment overcomes the rejection of claim 1. The cancellation of claims 12-13 herein renders their rejection moot.

Applicant herein amends claims 2 to overcome the rejection with clarifying language.

Applicant submits that the amendment overcomes the rejection

Applicant herein amends claims 4 and 5 to overcome the rejection regarding “meta-replets.” Specifically, the claims are amended to substitute the term “certain” for the term “meta-replets.” Again, while Applicant feels the readability of the claims suffer, the claims are amended in order to fully cooperate with the Examiner. The adjective “certain” is used in the given context merely as a label for the convenience of the reader so that subsequent reference to the same “replet” may be clearly referred to in a definite fashion by means of the label.

Applicant submits that the amendment overcomes the rejection.

Applicant herein amends claims 3 and 6 to overcome the rejection regarding “indirection.” Specifically, “indirection” is replaced with “a pointer.” No new matter is added, since the original application provides support. See, e.g., original application, as published, paragraphs 51 and 52. Applicant submits that the amendment overcomes the rejection.

35 USC 101 Rejections

Claims 1-13 are rejected under 35 USC 101 on grounds that these claims are drawn to nonstatutory subject matter. These claims are rejected for the following reasons.

Applicant thanks the Examiner for the helpful suggestion that the rejection may be overcome by amendment of the claims to recite that a result of the process is outputted to a user. Applicant amends claim 1 accordingly. No new matter is added, since the original application provides support. See, original application, as published, e.g., paragraph 104 and 116. Applicant submits that the amendment overcomes the rejection of claims 1-11. The cancellation of claims 12-13 herein renders their rejection moot.

35 USC 103 Rejections

Claims 1-13 are rejected under 35 USC 103(a) as being unpatentable over Computer and Chemistry, 1999, Vol. 23, p.365-385 ("Taylor"), in view of US 5,832,272 ("Kalantery"). The cancellation of claims 12-13 herein renders their rejection moot.

Applicant herein amends claim 1 to overcome the rejection and amends dependent claims herein to conform them to amended claim 1. No new matter is presented, since the original application provides support for the amendments. That is, an additional replet, e.g., "actata," is applied after a backbone and a replet-sequence matrix are constructed based on initial reptles. Original application, as published, e.g., paragraph 73. An additional parameter ".delta." is included in match-set entries shown in Table 3, as compared to prior art match-set entries of Table 2. Original application, as published, e.g., paragraphs 56 and 57 and Table 3. The position match entries for each replet enable selecting between reconstructing the sequence data responsive to i) the initial reptles without the at least one additional replet and ii) the initial reptles with the at least one additional replet). Original application, as published, e.g., paragraph 56 (Since the "matching subsequence," i.e., each initial replet, is removed from the sequence, "these entries," i.e., the additional reptles, "become invalid," i.e., would be invalid if it were not for the disclosed arrangement to "make these entries valid" via additional parameter ".delta." in the match-set entries of Table 3, for example).

Applicant submits that the amendment overcomes the rejection. In particular, Applicant submits that the references do not teach or suggest, neither alone nor in combination, "identifying initial reptles and at least one additional replet" and "storing . . . for each initial and additional replet, at least two position-match parameters for recording a respective at least one data position of the replet within the sequence data."

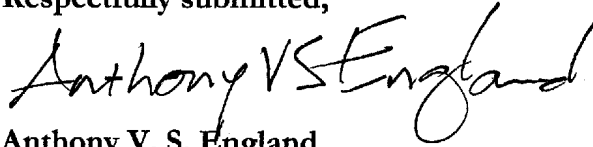
Still further, Applicant particularly submits that the references do not teach or suggest, neither alone nor in combination, where a certain data sequence has been generated at least in part by "removing the initial reptles from the sequence data" and then "presenting the certain data sequence to a user in combination with the position-match entries, wherein the position match parameters for each initial and additional replet enable selecting between reconstructing the sequence data responsive to i) the initial reptles without the at least one additional replet and ii) the initial reptles with the at least one additional replet."

For at least these reasons, the invention as recited in amended claim 1 is patentably distinct. Applicant submits that the amended claim is, therefore, allowable. Likewise, claims 2-11 are allowable at least because they rely upon amended claim 1.

REQUESTED ACTION

For the reasons explained herein above, Applicant requests that all the claims be promptly allowed and that the application be passed to issuance.

Respectfully submitted,

A handwritten signature in black ink that reads "Anthony V. S. England". The signature is written in a cursive, flowing style.

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